

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
Andreas ABEL et al. :
Serial No. NEW : **Attn: APPLICATION BRANCH**
Filed August 28, 2003 : Attorney Docket No. 2003_1239

SENSOR PLATFORM AND METHOD FOR
THE DETERMINATION OF MULTIPLE ANALYTES
(Rule 1.53(b) Continuation
of Serial No. 10/000,957,
Filed December 4, 2001)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 23-0975

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of ☒ the references listed on attached form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. 10/000,957.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

and thus no certification and/or fee is required.

- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

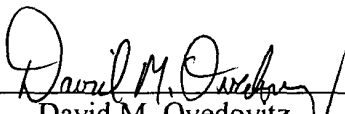
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
 - b. ☒ a foreign patent office search report (in the English language) submitted herewith,
 - c. ☒ the concise explanation contained in the specification of the present application at pages 2-15,
 - d. ☒ the concise explanation set forth in an English language abstract,
 - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Andreas ABEL et al.

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August 28, 2003

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: August 28, 2003

ATTY DOCKET NO.
2003_1239SERIAL NO.
NEWAPPLICANT
Andreas ABEL et al.FILING DATE
August 28, 2003GROUP
2878

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,738,825	4/1998	Rudigier et al.			
	AB	5,082,629	1/1992	Burgess, Jr. et al.			
	AC	5,779,978	7/1998	Hartmann et al.			
	AD	5,478,755	12/1995	Attridge et al.			
	AE	5,841,143	11/1998	Tuma et al.			
	AF	5,006,716	4/1991	Hall			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AG	0 455 067	11/1991	EP				
	AH	44 10 258	10/1994	DE				
	AI	2 276 635	10/1994	GB				
	AJ	99/13320	3/1999	WO				
	AK	98/21571	5/1998	WO				

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AL	K. Tiefenthaler, W. Lukosz, "Sensitivity of Grating Couplers as Integrated-Optical Chemical Sensors", OPTICAL SOCIETY OF AMERICA, Switzerland, Vol. 6, No. 2, (1989), pp. 209-220
	AM	W. Lukosz, Ph. M. Nellen, Ch. Stamm, P. Weiss, "Output Grating Couplers on Planar Waveguides as Integrated, Optical Chemical Sensors", SENSORS AND ACTUATORS, B1, Switzerland, pp 585-588 (1990)
	AN	T. Tamir, S. T. Peng, "Analysis and Design of Grating Couplers", APPLIED PHYSICS, 14, New York, pp. 235-254 (1977)
	AO	Y. Zhou, P. J. R. Laybourn, J.V. Magill & R. M. De La Rue, "An Evanescent Fluorescence Biosensor Using Ion-Exchanged Buried Waveguides and the Enhancement of Peak Fluorescence*", BIOSENSORS & BIOELECTRONICS 6, United Kingdom, (1991), pp. 595-607
	AP	Don S. Goldman, P. L. White, and N.C. Anheier, "Miniaturized Spectrometer Employing Planar Waveguides and Grating Couplers for Chemical Analysis", APPLIED OPTICS, Vol. 29, No., 31 (1990), pp. 4583-4589

EXAMINER

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,649,280	3/1987	Holland et al.			
	AB	5,081,012	1/1992	Flanagan et al.			
	AC	5,445,934	8/1995	Fodor et al.			
	AD	5,101,459	3/1992	Sunagawa			
	AE	5,455,178	10/1995	Fattinger			
	AF	5,577,137	11/1996	Groger et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AG	90/06503	6/1990	WO				
	AH	91/10122	7/1991	WO				
	AI	95/33197	12/1995	WO				
	AJ	95/33198	12/1995	WO				
	AK	95/03538	2/1995	WO				

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AL	R. Ludwig, "Integrated Optical Components in Substrate Glasses ¹ ", GLASTECHNISCHE BERICHTE, Vol. 62, No. 8, pp. 285-297, (1989)
	AM	R. E. Kunz, "Totally Integrated Optical Measuring Sensors", SPIE, CHEMICAL, BIOCHEMICAL AND ENVIRONMENTAL FIBER SENSORS III, (1991), Vol. 1587, pp. 98-113
	AN	D. Rosenblatt et al., "Resonant Grating Waveguide Structures", IEEE JOURNAL OF QUANTUM ELECTRONICS, Vol. 33, No. 11, (1997), pp. 2038-2059
	AO	W. C. W. Chan and S. Nie, "Quantum Dot Bioconjugates for Ultrasensitive Nonisotopic Detection", SCIENCE, Vol. 281, (1998), pp. 2016-2018
	AP	R. E. Kunz, J. Edlinger et al., "Grating Couplers in Tapered Waveguides for Integrated Optical Sensing", in Proc. SPIE, Vol. 2068, (1994), pp. 313-325

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	AA	6,078,705	6/2000	Neuschafer et al.			
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AJ	94/27137	11/1994	WO				
	AK	96/35940	11/1996	WO				
	AL							
	AM							
	AN							

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	
	AP	
	AQ	

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.